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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,338	10/17/2003	Peter Rac Shintani	81100/7114	2276
37123 7590 09/21/2007 FITCH EVEN TABIN & FLANNERY 120 SOUTH LASALLE SUITE 1600 CHICAGO, IL 60603			EXAMINER LONSBERRY, HUNTER B	
			ART UNIT 2623	PAPER NUMBER
			MAIL DATE 09/21/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/688,338

Applicant(s)

SHINTANI, PETER RAE

Examiner

Hunter B. Lonsberry

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Response to Arguments*

Applicant's arguments filed 7/5/07 have been fully considered but they are not persuasive.

Applicant argues that the combination of Johnson and Shintani fails to describe selecting a first single modulation scheme of a plurality of modulations schemes on the first input and that Shintani fails to teach selecting a modulation scheme of a plurality of modulation schemes on a first input and there is no need for Shintani to perform a selection (pages 8-9).

The Examiner disagrees. Johnson is relied upon to teach the *selection* step, Shintani is relied upon for the *scanning* step. Further, Johnson discloses that data from multiple sources may be received over a first input, and that the sources received over that input may be selected to be only certain signal sources (page 6, lines 12-21, only VHF/UHF inputs, only a certain range of channels, only DBS/STB connections etc) and further discloses tuning to a plurality of channels, recording the receivable channels in a channel map and not performing a full auto-program (Page 5, Lines 29-31; Page 6, Lines 1-21).

The Johnson reference discloses that the system may only accept signals with particular characteristic (e.g. modulation scheme) (Page 6, Lines 13-19); however, the reference is silent with respect to scanning a first modulation scheme on a first input.

The Shintani et al. reference provides evidence that it is known to scan a first modulation scheme on a first input so as to reduce the auto program time (Figure 5, Col 4, Lines 20-41, The system scans only the NTSC channels and not all modulation schemes see figure 6). Accordingly, a modification to the Johnson reference so as to implement scanning a first modulation scheme on a first input such as that offered by Shintani et al. would have been obvious to one of ordinary skill in the art for the stated advantage.

Thus the combination of Johnson and Shintani would only scan for a certain modulation scheme for a particular input and therefore teaches each and every element of the claims. Further it is the combination of Johnson and Shintani, which teaches each and every element of the claims.

Applicants argue that the combination fails to teach a processor coupled with a tuner, wherein the processor receives the first signal and performs a channel mapping of the first signal while limiting the channel mapping to the first signal and completing a full channel mapping of the other signals received through the plurality of inputs. Shintani and Johnson have inputs, which are dedicated to only a single signal and modulation type (pages 9-11)

The Examiner disagrees. Johnson clearly discloses a processor 32 in figure 1 which is coupled to the tuners and inputs and implements the routines (column 4, line 25-column 5, line 5). Johnson discloses that data from multiple sources may be

received over a first input, and that the sources received over that input may be selected to be only certain signal sources (page 6, lines 12-21, only VHF/UHF inputs, only a certain range of channels, only DBS/STB connections etc) and further discloses tuning to a plurality of channels, recording the receivable channels in a channel map and not performing a full auto-program (Page 5, Lines 29-31; Page 6, Lines 1-21.

Johnson discloses selecting a single input and *scanning only that input*, further Johnson discloses that the input may carry only VHF/UHF inputs, only a certain range of channels, only DBS/STB connections etc. Shintani discloses scanning only a certain modulation scheme. If each channel is considered a signal, multiple signals, which are modulated differently, are carried over the same input, and only certain signals are scanned, as taught by Johnson, the Examiner is confused as to how this is not equivalent to applicant's invention. The combination of Johnson and Shintani would result in only the data carried on a single input to be scanned for a certain modulation scheme.

Applicant argues that Johnson and Shintani does not disclose determining whether or not a channel map exists. The cited portions by the Examiner support applicant's arguments. (Page 11).

The Examiner disagrees. Shintani discloses that when a conventional receiver is powered up for the first time, the program map contains no channel data (column 1, lines 13-19). In response to a user command to auto program, the channel map data is

then programmed in (column 3, line 65-column 4, line 20). AS the STB knows that no data is present, a determination is made.

Applicant argues that one skilled in the art would not combine Johnson with Shintani, as it would render Johnson inoperable for its intended purpose. Creating a map of both 8VSB and NTSC is a stated purpose of Shintani (pages 12-13)

The Examiner disagrees and notes that Applicant again appears to be confusing the *selection* and *scanning* steps required by the claims. Further the Examiner notes that the Electrical Arts are well known for being predictable. The combination of Johnson and Shintani would only select a single modulation scheme from multiple schemes carried on a single input, and scan a single modulation scheme on a single input. The combination of Shintani with Johnson provides an advantage in that programming time is reduced. Therefore the combination of Johnson and Shintani is proper and teaches each and every element of the claims.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-13 and 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (WO 01/06771) in view of Shintani et al. (US Pat No 6,137,546).

In regard to claims 1-2, 9, 12 and 17-18, the Johnson reference discloses selecting a first input of a plurality of inputs (Page 2, Lines 25-28), tuning to a plurality of channels, recording the receivable channels in a channel map and not performing a full auto-program (Page 5, Lines 29-31; Page 6, Lines 1-21).

The Johnson reference discloses that the system may only accept signals with particular characteristic (e.g. modulation scheme) (Page 6, Lines 13-19); however, the reference is silent with respect to scanning a first modulation scheme on a first input.

The Shintani et al. reference provides evidence that it is known to scan a first modulation scheme on a first input so as to reduce the auto program time (Figure 5, Col 4, Lines 20-41). Accordingly, a modification to the Johnson reference so as to implement scanning a first modulation scheme on a first input such as that offered by Shintani et al. would have been obvious to one of ordinary skill in the art for the stated advantage.

In regard to claim 3 and 7-8, the Johnson reference discloses determining if the channel map includes an assignment for a first tune channel, identifying a channel name associated with the first tuned channel and replacing the assignment with the first tuned channel and recording the channel and the channel name in the channel map (Page 6, Lines 1-11).

In regard to claims 4-6, as aforementioned, the combined teaching discloses the scanning a signal modulated by the first modulation scheme and identifying channels carrying broadcast information. However, the reference is silent with respect to comparing the scanned channel with the mapped channels and initiating the tuning, the determining and recording when a difference is detected. The examiner takes official notice that it is notoriously well known in the art to utilize the particular usage of comparing current channel information to mapped information when updating in order efficiently maintain current information. Accordingly, the particular usage of comparing current channel information to mapped information when updating would have been obvious to one of ordinary skill in the art for the stated advantage.

In regard to claim 10, Johnson discloses that the channel map is limited to the selected input (Page 6, Lines 9-11).

In regard to claims 11-12, Johnson discloses determining if a signal quality meets a predefined threshold and recording the channels that have met the predefined threshold (Page 7, Lines 8-22).

In regard to claims 13, and 15-16, Shintani discloses determining if a channel map exists for the selected modulation scheme and tuning in a first or second channel not recorded in the map (Col 4, Lines 21-41). Johnson discloses determining if a signal quality meets a predefined threshold and initiating the generation of the map the channels that have met the predefined threshold (Page 7, Lines 8-22).

In regard to claim 19, the reference is silent with respect to the analog signal being NTSC and the digital signal being QAM. The examiner takes official notice that it



is notoriously well known in the art to utilize the particular usage with respect to the analog signal being NTSC and the digital signal being QAM is well known in the art so as to conform to industry standers enabling interoperability. Accordingly, the particular usage of the analog signal being NTSC and the digital signal being QAM would have been obvious to one of ordinary skill in the art for the stated advantage.

In regard to claim 20, Johnson discloses a video processor coupled to the tuner and memory (Figure 1).

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (WO 01/06771) in view of Shintani et al. (US Pat No 6,137,546) in further view of U.S> Patent 6,775,843 to McDermott.

Regarding claim 14, the combination of Shintani and Johnson discloses selecting an input and autoprograming the channels for a particular modulation scheme.

Shintani and Johnson do not disclose determining the broadcaster of a second channel, comparing it with a stored recorded, determining if it is different and initiating the generating of the channel map for the entire selected signal when the determined broadcaster is different.

McDermott scans a number of virtual channels and physical channels to determine if the CTSID and TSID where generated in the mapping step correspond to one another, if they do not, the channel numbers are reallocated for the selected virtual

channel signal (figure 4a, 6, column 5, lines 35-column 7, line 13), thereby reducing a conflict if a user selects that signal.


Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the combination of Johnson and Shintani to utilize the mapping comparison features of McDermott for the advantage of reallocating the channel numbers so to prevent conflicts when a user tunes to that channel.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hunter B. Lonsberry whose telephone number is 571-272-7298. The examiner can normally be reached on Monday-Friday during normal business hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Hunter B. Lonsberry  
Primary Examiner  
Art Unit 2623

HBL